

17 MAY 2001



Civil Engineering

**MANAGEMENT OF RECOVERABLE AND
UNUSABLE PETROLEUM PRODUCTS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO/PP WWW site at:
<http://afpubs.hq.af.mil>.

OPR: 43 CES/CEV (Mr Garland Evans)
Supersedes PAFBI 32-102, 1 May 1997

Certified by:
Pages: 22
Distribution: F

This instruction prescribes policies, responsibilities, and procedures for collecting, storing, returning to inventory, reusing, or recycling of recoverable petroleum products, and disposing of all unusable petroleum products and hazardous waste fuels generated on the base in accordance with Air Force Instruction (AFI) 32-7061, *The Environmental Impact Analysis Process* (supersedes AFR 19-2) and AFI 23-502, *Recoverable and Unusable Liquid Petroleum Products* (supersedes AFR 19-14). It applies to all units and personnel assigned or attached to Pope AFB. Failure to observe the prohibitions and mandatory provisions in this instruction by military personnel is a violation of Article 108 of the Uniform Code of Military Justice. Violations of this instruction by Air Force civilian employees may result in appropriate disciplinary action without regard to criminal liability.

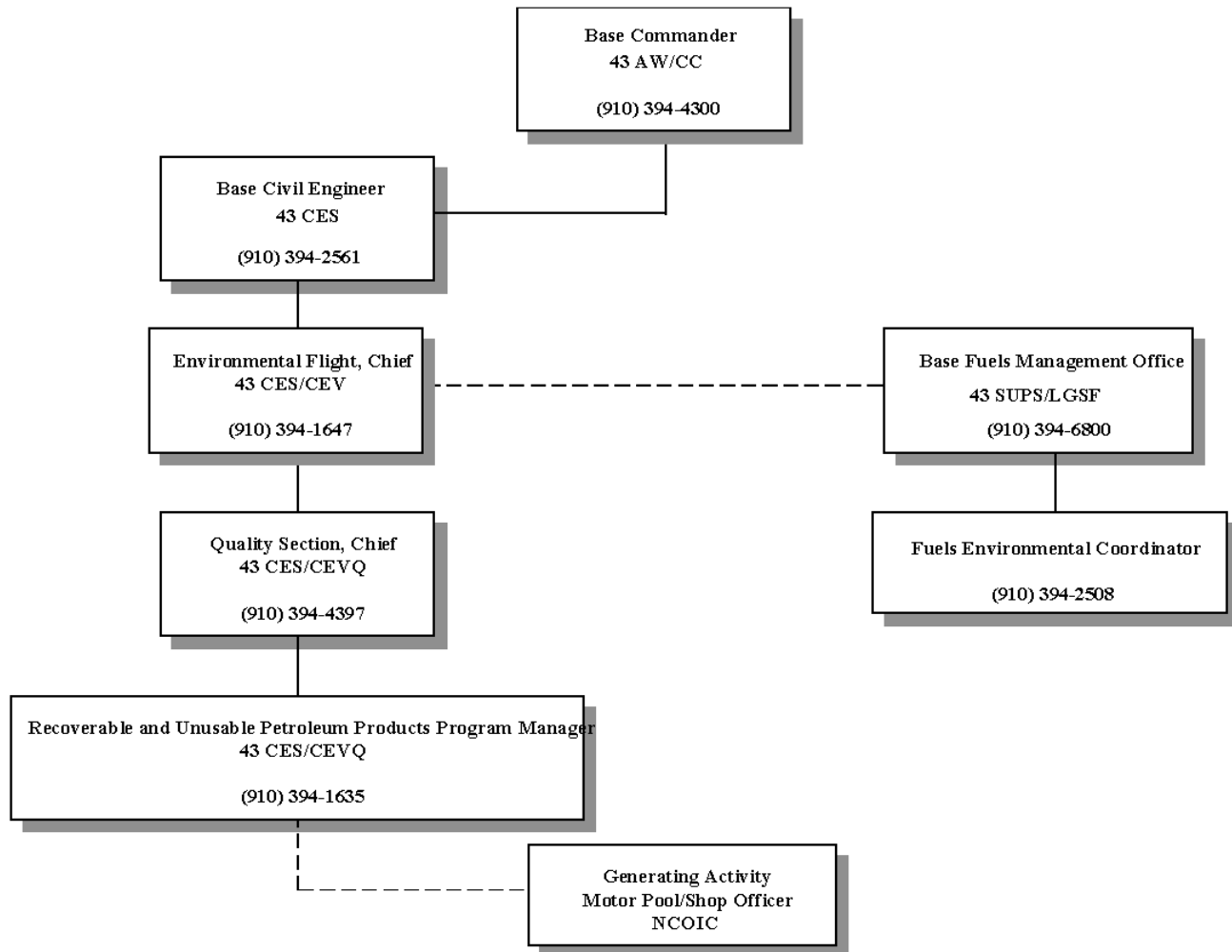
SUMMARY OF REVISIONS

This publication revises guidance given previously in Pope AFB Instruction 32-102, 1 May 1997 and conforms with format requirements outlined in AFI 23-502, 6 April 1994. This document is organized in the following manner to expedite the proper handling of these materials. Any questions or issues presented herein should be directed to the Environmental Flight (43 CES/CEV). Section 1: Responsibilities. The responsibilities for management of the program and the responsibilities for other Base activities are presented in this section (AFI 23-502, Section 8.3). Section 2: General. The intent of the Air Force's pollution prevention program related to recoverable fuels and petroleum products is presented in this section. Section 3: Identification of Generating Activities. This section identifies all generating activities by organization and lists recoverable and unusable products that are generated at the Base (AFI 23-502, Sections 8.1 and 8.2). Section 4: Collection and Recovery Procedures. Procedures to collect, store, return to inventory, reuse, and recycle fuels and oils are presented in this section (AFI 23-502, Sections 8.4 and 8.7). Section 5: Removal and Disposal Procedures. Procedures to remove and dispose of petroleum products are presented in this section (AFI 23-502, Sections 8.4, 8.6, and 8.7). Section 6: Financial Accountability. Accounting procedures for recoverable and unusable petroleum products are presented in this section (AFI 23-502, Section 8.5).

1.	Responsibilities.	3
Figure 1.	Organizational Chart for Pope AFB Operating Instruction	3
2.	General.	5
3.	Identification of Generating Activities.	5
Table 1.	Generating Activities at Pope AFB.	6
4.	Collection and Recovery Procedures.	8
Figure 2.	Recovery Test Criteria for Fuels.	11
Figure 3.	Decision Matrix for the Disposition of Oils.	12
5.	Removal and Disposal Procedures.	13
Figure 4.	Oil Pumping Contract Organizational Chart.	14
Table 2.	Used Oil Tanks and Oil/Water Separators Serviced Under Oil Pump Contract.	15
6.	Financial Accountability.	18
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION		20

1. Responsibilities. A number of individuals and agencies carry out activities related to petroleum-product recovery and disposal at Pope AFB. The organizational structure for implementing this operating instruction is presented in **Figure 1.**

Figure 1. Organizational Chart for Pope AFB Operating Instruction



1.1. The Installation Commander.

1.1.1. Oversees the development of a comprehensive program to manage the segregation and collection, reuse, or recycling of recoverable products, and the disposition of unusable petroleum products.

1.1.2. Directs operational agencies that are major users and handlers of petroleum products to implement the program.

1.1.3. Reviews and approves the comprehensive program for transmission to the Headquarters (HQ) Air Mobility Command (AMC) LGSF/CEV.

1.1.4. Develops guidelines for using, inspecting, and maintaining oil/water separators.

1.1.5. Submits the comprehensive program for functional review to the following agencies: Safety Office, Environmental Health, Defense Reutilization and Marketing Office (DRMO), and Accounting and Finance.

NOTE: No single organization at Pope AFB has the resources needed to implement the program. Therefore, the Commander must delegate to primary supporting agencies to obtain technical help and resources.

1.2. Civil Engineering Squadron, Environmental Flight (43 CES/CEV).

1.2.1. Provides technical guidance and assists organizations at Pope AFB on how to dispose of unusable petroleum products.

1.2.2. Manages recyclable petroleum products for Pope AFB within the overall Resource, Recovery, and Recycling (RRR) Program.

1.2.3. Develops procedures at Pope AFB for disposal of waste petroleum products.

1.2.4. Oversees changes for permanently installed petroleum recovery facilities to meet individual installation requirements. (Currently there are no permanently installed petroleum recovery facilities at Pope AFB).

1.2.5. Acts as overall manager for the comprehensive program at Pope AFB and develops the environmental portion of the program. Under this part of the program, the Base Civil Engineer:

1.2.5.1. Advises Pope AFB agencies on how to collect, store, and dispose of petroleum products according to environmentally acceptable procedures and United States Environmental Protection Agency (USEPA) and state regulations.

1.2.5.2. Evaluates the environmental program on compliance with established standards of pollution control.

1.2.6. Coordinates with Fort Bragg on the transportation of unusable petroleum products from Pope AFB to designated delivery point for reprocessing.

1.3. The Base Fuels Management Office (43 SUPS/LGSF).

1.3.1. Helps organizations at Pope AFB in determining how to dispose of used petroleum products.

1.3.2. Accepts and accounts for suitable products that are returned to fuels bulk storage facilities at Pope AFB.

1.3.3. Develops procedures for returning unused products to inventory as part of the base program.

1.3.4. Operates permanently installed bulk storage facilities at Pope AFB.

1.4. The Generating Activity.

1.4.1. Supervises proper collection, segregation, handling and disposal of unused, recoverable, and unusable products or hazardous waste fuels according to Technical Order (TO) 42B-1-23, *Management of Recoverable and Waste Liquid Petroleum Products*, this operating instruction, and USEPA and state regulations.

NOTE: Once the generating activity decides to discard the fuel rather than reuse, recover, or recycle it, they shall manage the fuel, depending on its constituents, as a hazardous waste or according to used oil requirements.

- 1.4.2. Obtains enough suitable containers to properly segregate and store recoverable and unusable products and hazardous waste fuels by product type. Procures or locally constructs fuel bowsers for aircraft ground support to meet the standard specifications in TO 42B-1-23, Appendix A.
- 1.4.3. Paints or marks containers and bowsers according to TOs 42B-1-23, 35-1-3, *Corrosion Prevention, Painting, and Marking for US Air Force Support Equipment*, and 36-1-3, *Painting, Marking, and Lighting Requirements* for US Air Force Vehicles, as appropriate.
- 1.4.4. Provides or arranges for transportation of products to collection or disposal points according to this operating instruction.
- 1.4.5. Manages program for recoverable and unusable petroleum products at the operating level.
- 1.4.6. Submits data on quantity and identity of recoverable and unusable petroleum products, as required, to 43 CES/CEV. Presently, 43 CES/CEV primarily obtains information from Fort Bragg and from the Centralized Accumulation Site (CAS).

2. General. The Air Force has increased its emphasis on pollution prevention and energy conservation. The intent is to proceed with a positive program to improve management and reuse procedures by all activities generating recoverable fuels and petroleum products. Any planned or existing program for disposing of unusable and recoverable petroleum, oil, and lubricants (POL) products through resale, reclamation, custom recycling, re-refining, or combustion in heating plants is considered successful if the product identity is retained by careful product segregation. Maintenance organizations, Transportation, Fuels Management Office, Civil Engineering, Morale, Welfare & Recreation Self Service (MWRSS) Shops, Army Air Force Exchange Service (AAFES) Stations, and all other organizations generating unusable and recoverable fuel and petroleum products of any type will actively seek the assistance of the Environmental Flight, 43 CES/CEV, on any disposal problem.

3. Identification of Generating Activities.

3.1. Generating Activities. Generating activities by organization are shown in [Table 1](#). for Fiscal Year 1999. This information was compiled from storage tank log sheets at the CAS and from records of the oil pumping contract managed by Fort Bragg.

Table 1. Generating Activities at Pope AFB.

Organization	Type of Waste	Source ^a	Condition	Amount (gallons)
3 RD APS/TRDL	Hydraulic Fluid	Forklift Maintenance	unusable	1,145 ^b
3 RD APS/TRK	Oil	Forklift Maintenance	unusable	127 ^x
21 ST STS/LGT	Oil	Vehicle Maintenance	unusable	81 ^x
24 TH STS	Oil	Vehicle Maintenance	unusable	222 ^x
41 ST OPS	JP-8	Restoration Project	unusable	312 ^b
43 RD CES/CEF	JP-8	Fire Training	unusable	12,888 ^b
43 RD CES/CEOIP	Diesel	Generators, Filters	unusable	506 ^x
	Oil	Generators	unusable	455 ^x
43 RD CES/CEOILF	JP-8	Liquid Fuels Maintenance	reclaimable	165 ^x
43 RD MXS/AGE	JP-8	Flight Line	reclaimable ^c	18,278 ^x
	Oil	Equipment Maintenance	unusable	2647 ^x
	Synthetic Oil	Aircraft Maintenance	unusable	6172 ^x
	Mineral Oil	Maintenance on AGE Equipment	unusable	371 ^x
	Hydraulic Fluid	Aircraft Maintenance	unusable	521 ^x
43 RD MXS/LGMFW	Oil	OWS 760	unusable	2,393 ^b
43 RD MXS/LGMP	Synthetic Oil	Aircraft Maintenance	unusable	24 ^x
	Hydraulic Fluid	Aircraft Maintenance	unusable	319 ^x
43 RD MXS/LGMPB	Oil	Aircraft Maintenance	unusable	19 ^x
	Synthetic Oil	Aircraft Maintenance	unusable	197 ^x
43 rd MXS/LGMT	Oil	OWS 712	unusable	1,138
	Oil	Aircraft Maintenance	unusable	1,879
43 RD SUP	Oil	Expired Shelf Life	unusable	45 ^x
43 RD SUPS/LGSFO	MOGAS/Diesel	OWS 756	unusable	0
	JP-8	OWS 800, 805	unusable	0
	JP-8	Condensate from Bulk Storage	unusable	4,600
43 RD SUPS/LGSDH	Oil	Expired Shelf Life	unusable	44 ^x
43 RD SVS/SVRS	Oil/Hydraulic Fluid	Vehicle Maintenance	unusable	5,293 ^b
43 RD TRANS/LGTM	Diesel	Vehicle Maintenance	unusable	361 ^x

Organization	Type of Waste	Source ^a	Condition	Amount (gallons)
	Oil	Vehicle Maintenance	unusable	46 ^x
	JP-8	OWS 450	unusable	2,569 ^b
	Oil	OWS 558, 768, 555	unusable	2,933 ^b
43 RD TRANS/LGTMG	Diesel	Vehicle Maintenance	unusable	386 ^x
	Oil	Vehicle Maintenance	unusable	609 ^x
43 RD TRANS/LGTMR	Diesel	Vehicle Maintenance	unusable	234 ^x
	Oil	Vehicle Maintenance	unusable	641 ^x
	Oil	OWS 150	unusable	260 ^b
43 RD TRANS/LGTMS	Oil	Vehicle Maintenance	unusable	54 ^x
TOTAL				78,267

a. OWS = Oil/Water Separator.

b. Used data for the last three quarters of FY99 to estimated annual amounts from oil pump contract.

c. LGSF estimates that 80% of fuel sent to the CAS from the flightline can be reclaimed or recycled.

3.2. Recoverable and Unusable Petroleum Products. Fuels (including aviation and ground fuel) and oils (including used oils, aircraft oils/hydraulic oils, used engine oils, and used synthetic turbine oils) are recoverable and/or unusable petroleum products. Included in [Table 1](#) is a listing of recoverable and unusable products and hazardous waste fuels generated by an organization, including source, approximate quantity, and condition.

3.3. Exemption for Halogenated Hydrocarbons. The provisions of this instruction are not applicable to the handling, recovery, or disposition of halogenated hydrocarbons. The following definition and examples of halogenated hydrocarbons are provided to prevent the unauthorized commingling of halogenated hydrocarbons with other unusable petroleum products defined in this instruction.

3.3.1. Definition. Halogenated hydrocarbons are petroleum-based compounds that contain one or more halogens. These halogens include fluorine, chlorine, bromine, and iodine. When halogenated compounds are burned, corrosive and toxic products are formed. Personnel who suspect the presence of halogenated compounds should notify the Base Civil Engineer.

3.3.2. A few examples of halogenated hydrocarbons used at Air Force Bases include:

3.3.2.1. PCB-Polychlorinated biphenyl transformer insulating oils, also known as askarels and many other trade names.

3.3.2.2. CB-Bromochloromethane fire extinguisher material.

3.3.2.3. FREON-Refrigerants and solvents.

3.3.2.4. PERCHLOROETHYLENE-Vapor degreasing solvent.

3.3.2.5. TRICHLOROETHYLENE-Vapor degreasing solvent.

4. Collection and Recovery Procedures.

4.1. Collection.

4.1.1. Collection Points. The designation of collection points shall be coordinated with the local ground safety office and fire department and be in close proximity to the generating activities. Containers shall be placed to comply with National Fire Protection Association Codes.

4.1.2. Method of Collection. Suitable containers used to collect and store recoverable and unusable petroleum products include drums, carts, bowsters, underground storage tanks, and above ground storage tanks. Petroleum products are also recovered from oil/water separators.

4.1.2.1. Drums. Collection containers, such as 55-gallon drums, shall meet the requirements of DLAR 4145.41/AFR 71-5, *Performance Oriented Packaging of Hazardous Material*. They shall have appropriate closure devices to prevent vaporization of product and/or entry of water or other mixtures not compatible with the product being collected. These drums or containers may be mounted on carts, dollies, or trailers to facilitate mobility, safety and ease of handling.

4.1.2.2. Bowsters. Containers such as carts or bowsters used to collect fuel drained from aircraft pumps and other residual fuel must be clean, include a low point drain, be capable of preventing the entrance of material other than the product being collected, and be marked for and restricted to a single category, such as JP-8 fuel. Use of large-volume containers and bowsters must be coordinated with Base Ground Safety and the Fire Department.

4.1.2.3. Flammables. Containers used to store flammable liquids shall be painted IAW TO42B-1-23, Sect II. Markings for categories 1 through 4 will be as follows:

Category 1. Reclaimable JP-8 fuel
Category 2. Reclaimable fuels and oils
Category 3. Reclaimable engine oils
Category 4. Reclaimable synthetic oils

NOTE: Except for hazardous waste labeling, the word "Waste" or similarly interpreted wording shall not be placed on any containers storing used petroleum products to avoid the misconception that the container is used for trash, garbage, or other miscellaneous dumping and to avoid the misconception that the materials and/or containers contain a hazardous waste. Instead, the word "Reclaimed" shall be placed on the container with other POL descriptions.

4.2. Segregation. Segregation of recoverable and unusable petroleum products is intended to increase their market value, minimize disposal cost, and also reduce the threat of environmental pollution. Pollution prevention can also be achieved by segregating non-hazardous used petroleum products from other products that are deemed to be hazardous wastes.

4.2.1. Categories of Segregation. Depending upon the organization, up to five categories of used petroleum products are collected at Pope AFB.

4.2.1.1. Category 1. JP-8 Jet Fuels.

4.2.1.2. Category 2. Other Fuels and Oils.

4.2.1.2.1. Calibrating Fluid (MIL-C-7024).

4.2.1.2.2. Purging Fluid (MIL-F-38299).

4.2.1.2.3. Avgas.

4.2.1.2.4. MOGAS.

4.2.1.2.5. Kerosene.

4.2.1.2.6. Diesel Fuel.

4.2.1.2.7. Hydraulic Fluid, Mineral Based (MIL-H5606, MIL-H6083).

4.2.1.2.8. Lubricating Oils.

4.2.1.2.9. Preservation Oils.

4.2.1.3. Category 3. Engine Oils.

4.2.1.3.1. Used Motor Crankcase Oils (MIL-L-46152).

4.2.1.3.2. Reciprocating Aircraft Engine Oil (MIL-L-6082, MIL-L-2295).

NOTE: Category 3 oils may be contaminated by lead. This category must be kept separate from other Recyclable Recoverable and Waste (RR&W) petroleum products.

4.2.1.4. Category 4. Synthetic Oils.

4.2.1.4.1. Used Turbine Engine Oils (synthetic) (MIL-L-7808, MIL-L-23699).

4.2.1.4.2. Used Hydraulic Fluid (synthetic) (MIL-H-83282A).

4.2.1.5. Category 5. Mixed Liquids. Mixed petroleum liquids not meeting the segregation requirements of categories 1 through 4.

NOTE: Except for the products from oil/water separators, every effort must be made to segregate used petroleum products and place the products in containers for category 1 through 5 products.

4.3. Fuels. Disposition of fuels should be in accordance with TO 42B-1-23. Recovery test criteria for fuels are summarized in **Figure 2**. All liquid fuels recovered in defueling units, bowsers, or tanks will be recycled or reclaimed whenever possible.

4.3.1. Recyclable Product. When fuel bowsers are full and need to be emptied, the Aerospace Ground Equipment (AGE) Servicing section will contact the Fuels Control Center at 394-6786, to arrange for moving the fuel bowsers to Building 800. There a qualified fuels person shall perform the visual inspection in accordance with TO 42B-1-23. If the fuel is found acceptable, the bowsers will be moved back to Servicing to be emptied in the AGE Bulk Storage Tank. If the bower is found to be contaminated, then the unit will be taken back to the AGE Servicing section to be drained of all contaminants. Each organization that maintains reclaimed fuel bowsers, will maintain a designated contaminated fuel bowser. If the CAS is unable to accept the contaminated fuel, then servicing will contact the Pollution Prevention Manager to make arrangements for disposal (see **Figure 1**).

4.3.2. Reclaimable Product. Uncontaminated liquid fuels which cannot be emptied into the AGE Bulk Storage Tank due to insufficient capacity, will be sampled, filtered and returned for its origi-

nal intended purpose whenever possible. Once the fuel has been recovered, it shall be sampled and analyzed to determine conformance with the specifications in TO 42B-1-1, *Quality Control Of Fuels and Lubricants*. Samples shall undergo visual analysis to verify that the color is clear to straw and to determine if any suspended solids or free water are present. At the discretion of the Base Fuels Management Office, additional sampling and analyses may be required to determine if any degradation of the fuel exists. Once jet fuel is determined suitable for return to the bulk storage tank, it shall be passed through two filter separator elements before being issued to aircraft.

4.3.3. Recoverable and Unusable Product. Fuels, which cannot be reclaimed or recycled because of excessive contamination, shall be considered a non-recoverable and unusable petroleum product. Such materials shall be transferred to the CAS for appropriate handling or processed as a hazardous waste, if contaminated by heavy metals or halogenated hydrocarbons.

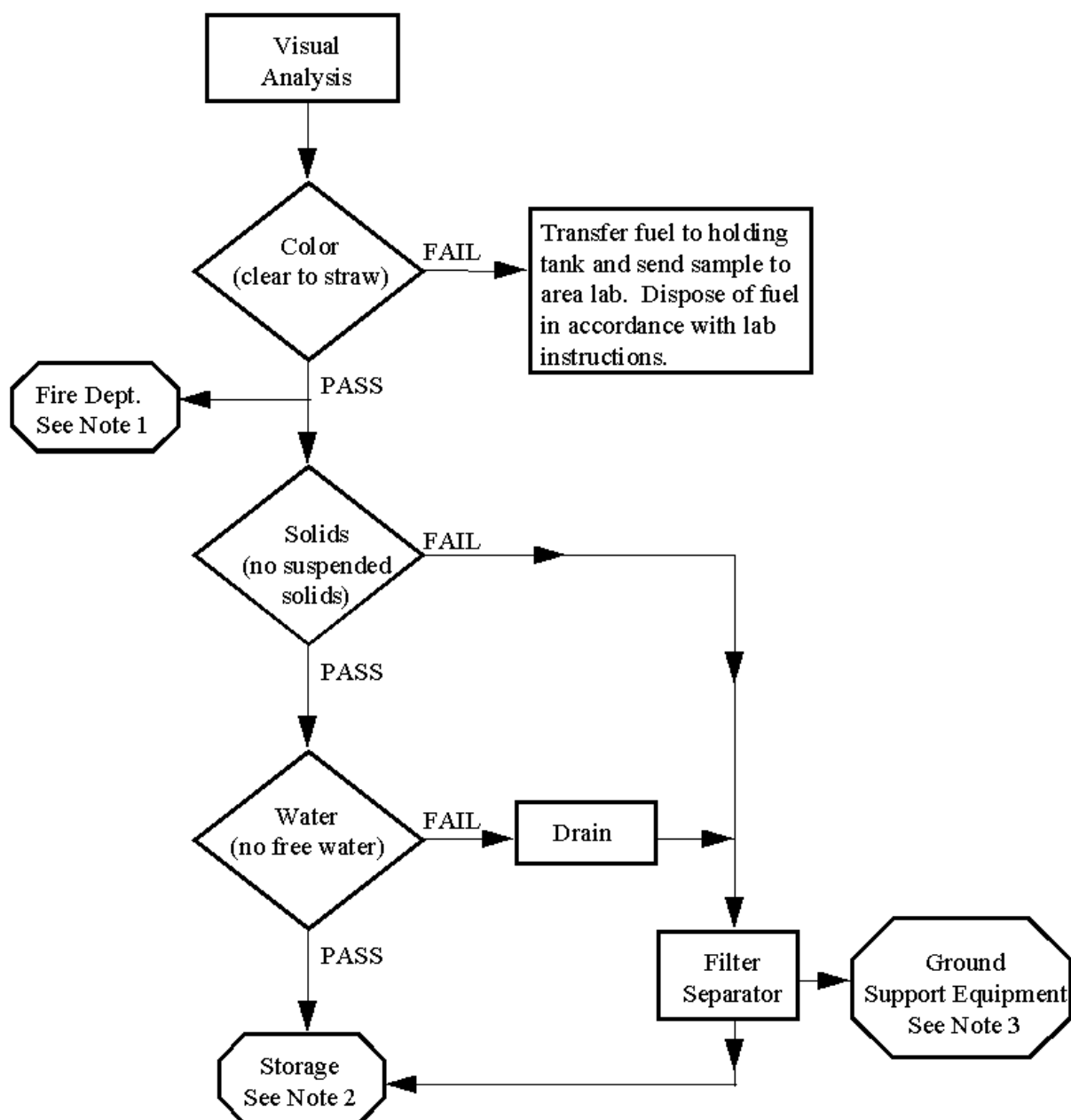
4.4. Oils. Disposition of oils shall be in accordance with TO 42B-1-23. A decision matrix for the disposition of oils is provided in [Figure 3](#).

4.4.1. Aircraft/Hydraulic Oil. Oils and hydraulic fluids drained from aircraft must be collected in clean containers. Used synthetics should be segregated from petroleum products due to their high resale value.

4.4.2. Used Engine Oils. Used engine (vehicle or aircraft) oils must be segregated from other petroleum products because of possible lead contamination.

4.4.3. Used Turbine Engine Oils (synthetic). Synthetic turbine oils shall be segregated from all other POL products because they command a high selling price, even after use. All synthetic oil will be processed through the DRMO with instructions to advertise through the National Bidders List.

Figure 2. Recovery Test Criteria for Fuels.

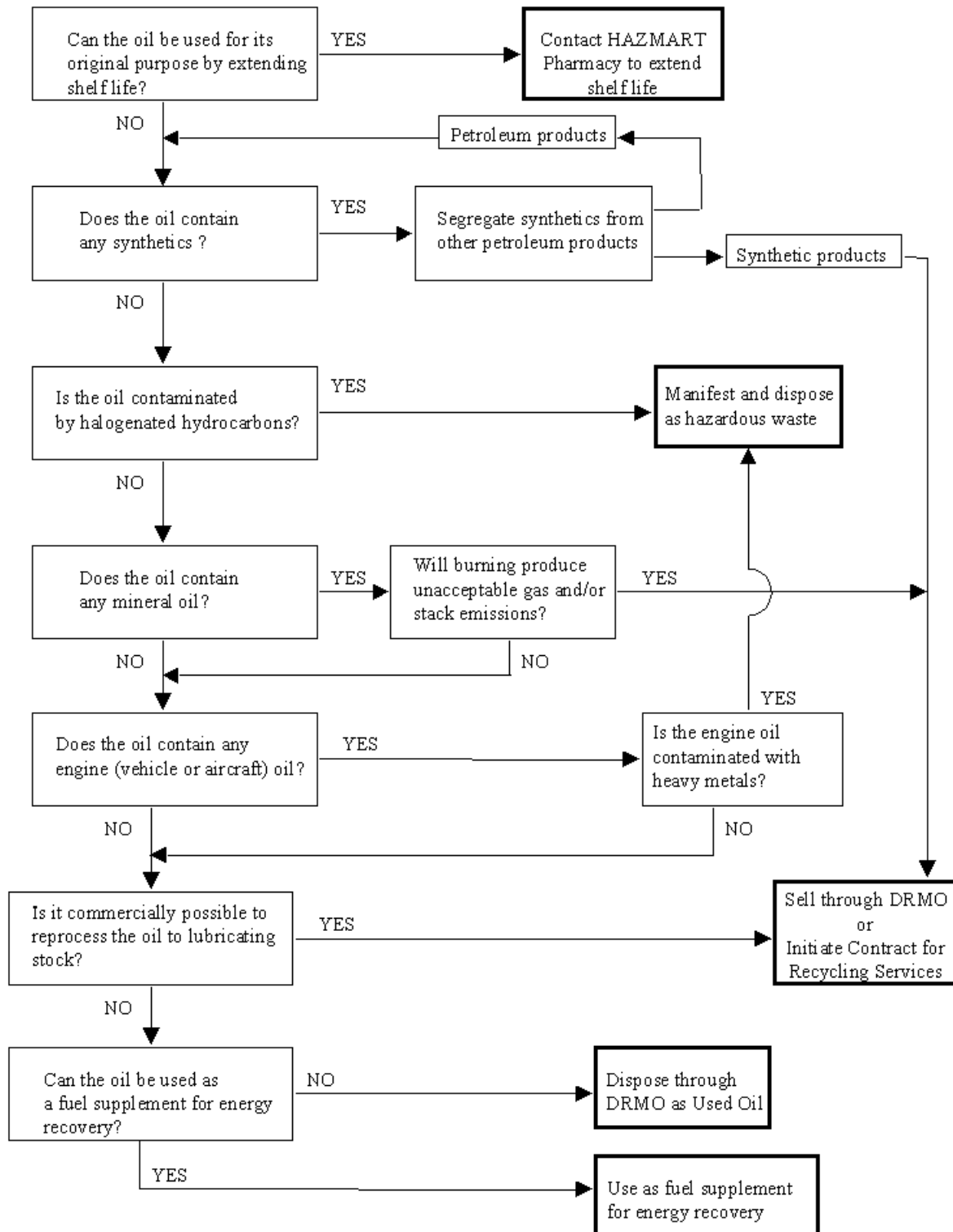


Adapted from T.O. 42B-1-23

Note 1 - Fuel may be issued to fire department for training without filtration.

Note 2 - Return to storage at a 10/1 blend ratio (ten gallons of specification product to one gallon of reclaimed product).
A minimum of 2 filtrations will be required prior to issue to aircraft.

Note 3 - Aviation fuel may be issued to ground support equipment after one filtration.

Figure 3. Decision Matrix for the Disposition of Oils.

Note: Decisions shall be based on user knowledge and/or testing.

5. Removal and Disposal Procedures.

5.1. Removal/Transport to Fort Bragg for Closed Loop Re-refined Oil Program. Fort Bragg currently administers a contract for the collection of re-refined and used oil at Fort Bragg and Pope AFB. Under this contract, all used oil that has tested as non-hazardous shall be pumped and collected by Safety Kleen. All used petroleum that exceeds 120 % of the new oil ordered shall be pumped at \$.18 per gallon. The organizational structure for this activity is presented in **Figure 4**. Any changes to this approach shall be approved by the Air Wing Commander, prior to execution, and this instruction shall be subsequently revised to reflect these changes.

5.1.1. Pumping Used Oil Tanks and/or Oil/Water Separators. The location, approximate collection frequency, and capacities of used oil tanks and oil/water separators to receive collection services are listed in **Table 2**. The contractor shall pump completely the oil containment section of API style oil/water separators to include any water that may be present. The fiberglass McTighe type separators shall have OIL ONLY PUMPED. If the contractor removes the water, the contractor shall replace it. These separators are dependent upon the water level to function properly. These separators are denoted by an asterisk (*) in **Table 2**. The contractor shall properly pump holding tanks to collect the oil. Some separators have separate holding tanks to collect the oil. These are denoted with two asterisks (**) in **Table 2**. and indicate the holding tanks are to be pumped. The contractor shall not pump used oil tanks or oil/water separators containing JP-8 or MOGAS. Arrangements for emptying used oil tanks and oil/water separators containing used fuel shall be coordinated with Safety Kleen. If Safety Kleen cannot pump the used fuel, the material will be transferred to the used tank at the CAS. Fuel pods (sized 500-550 gallons) are used as above ground storage due to the lack of adequate storage facilities.

NOTE: Oil tanks and/or oil/water separators are often contaminated with debris such as rags, cans, oil filters, sludge, and heavy lubricating grease. When the contractor encounters a tank or separator that contains debris or sludge, the contractor shall pump the tank/separator down to the level of the deposits, then report the tank/separator location and an estimate of the amount of deposits to the Contracting Officer's Representative (COR). The contractor shall note on the collection ticket any damaged, uncovered, or inoperative used oil tanks/separators discovered.

5.1.2. Service Orders. Service Orders shall contain, as a minimum, the following information: contractor's name and USEPA identification (ID) number, date, facility number, collection point, meter (or other measurement device) readings, amount in gallons of used oil collected at each tank/separator, halogen test results, and any indication if the product contained liquids other than used oil. The contractor shall identify the type of tank pumped on the order, i.e., underground storage tank, above ground storage tank, pod, drum, etc. Each service order shall be signed by the motor pool or shop officer/Noncommissioned Officer In Charge (NCOIC) for each used oil tank/separator pumped and the contractor employee pumping the tank.

5.1.3. Delivery. The contractor shall deliver the load to their facility in St. Pauls, NC. Before pumping, the contractor will perform a field test on the sample for halogen concentration using a contractor- furnished disposable test kit. If the halogen concentration is more than 1,000 ppm or if the used oil does not meet the required specifications as listed in 40 CFR 279, the contractor will be directed by the 43d Civil Engineering Environmental Flight to off-load the used oil in a designated holding tank for disposal by contract

5.1.4. Testing and Filtering.

Figure 4. Oil Pumping Contract Organizational Chart.

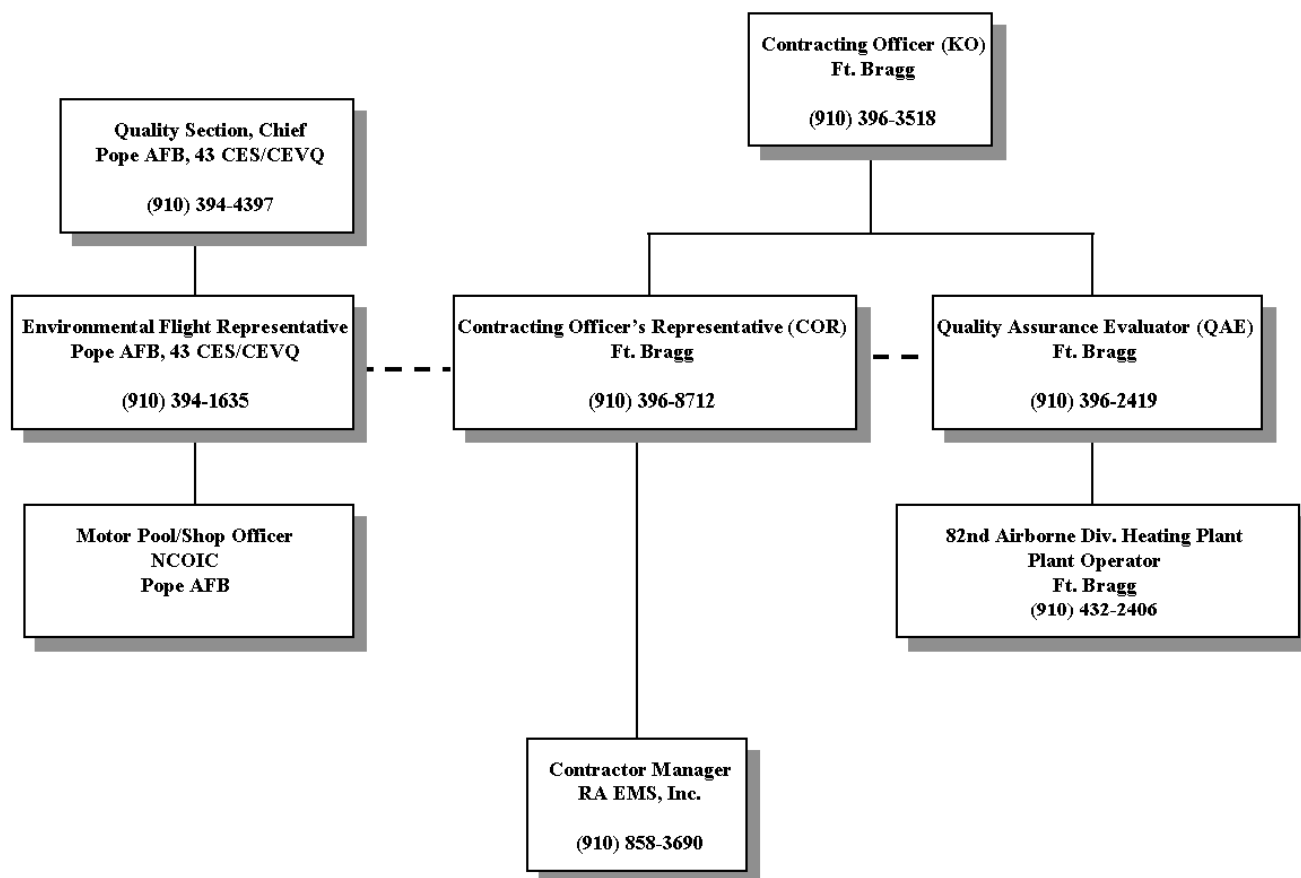


Table 2. Used Oil Tanks and Oil/Water Separators Serviced Under Oil Pump Contract.

		Estimated	
		Oil Capacity	Annual Generation
Facility No.	Category Description†	(gallons)	(gallons)
PUMPED EMPTY ONE TIME PER MONTH			
PAFB-742	SQ OPS, SHP A/M ORGL	500	6,000
PAFB- Fire Training Pit		500	6,000
PAFB-454	H/SHP, AUTOMOTIVE	600	7,200
PAFB-610-1	CAS	6,000	60,000
PAFB-610-2	CAS	5,000	60,000
PAFB-610-3	CAS	6,000	60,000
PUMPED EMPTY ONCE EVERY TWO MONTHS			
* PAFB-143-S	ASOS	500	2000
*PAFB-150A-S	SHP, REFL VEH	100-285	600-1,710
*PAFB-150B-S	REFLH VEH SHOP	500	1000
*PAFB-160-S	HAZARD STORAGE	1800	2500
*PAFB-175-S	PAVEMENTS/GRDS	1000	3000
**PAFB-759-S	SHP A/SE STOR FCLT	100-285	600-1,710
PUMPED EMPTY ONCE EVERY THREE MONTHS			
*PAFB-390A	GOLF COURSE MAINT	110	800
*PAFB-390B	GOLF COURSE MAINT	100	400
*PAFB-554-S	VEH MAINT SHP	100-285	500
*PAFB-558-S	VEH MAINT SHP	100-285	400-1,140
*PAFB-792-S	SHP JET ENG I/MNT	800	3,200
PAFB-454	H/SHP, AUTOMOTIVE	600	2,400
PAFB-550	VEH OPS ADMIN	52	350
PAFB-558	VEH MAINT SHP	1,000	4,000
**PAFB-768-S	VEH MAINT SHP	1,000	4,000
*PAFB-450-S	VEH MAINT SHP	1,200	4,800
PAFB-800	PMP STN, LF	1,200	0
PAFB-818	HYDR FL, BLDG	2,000	0
*PAFB-820	HYDR FL, BLDG	2,000	12,000

*PAFB-41112-S	HAZARDOUS SITE	4300	12,000
*PAFB-822	HYDR FL, BLDG	2,000	
PUMPED EMPTY ONCE EVERY FOUR MONTHS			
*PAFB-715-S	SHP JET ENG I/MNT	100-285	300-855
*PAFB-736-S	MAINT DOCK, FL SYS	500-550	1,500-1,650
*PAFB-623-S	BE STOR SHED	1,000	3,000
*PAFB-755-S	ACFT GEN PURP	8,000	8,000
*PAFB-792	SHP JET ENG I/MNT	2,000	2,000
PUMPED EMPTY ONCE EVERY SIX MONTHS			
*PAFB-162-S	PETROL OPS BLDG	100-285	200-570
*PAFB-805-S	HYDR FL, BLDG	100-285	200-570
*PAFB-250-S	FR STN	500-550	1,000-1,100
*PAFB-712-S	HG MAINT	2,000	4,000
*PAFB-756-S	VEH FL STN	1,000	2,000
*PAFB-760-S	PAD, ACFT WASH RK	1,500	3,000
PAFB-764	TRML, FLEET SVC	1,000	2,000
PUMPED EMPTY ONCE EVERY YEAR			
**PAFB-724-S	WPN SYS/M MGT FCLT	1,000	1,000
*PAFB-731-S	SHP ACFT GEN PURP	1,000	1,000
TOTAL ESTIMATED GENERATION PER YEAR (gallons)			232,800-232,045

* Fiberglass McTighe tank type separators (see Section 5.1.1.).

** Separator has a separate holding tank to collect the oil (see Section 5.1.1.).

5.1.4.1. Testing. The contractor shall collect a representative sample of used oil from each tank and test it to determine if it has a halogen concentration greater than 1,000 parts per million (ppm) prior to pumping. Oil/water separators do not require testing. Contractor-furnished, USEPA approved, disposable test kits and test procedures specifically designed for determination of halogen concentrations greater than 1,000 ppm shall be used. If the field testing shows the used oil to contain 1,000 ppm or greater halogen concentration, the contractor shall not pump or remove any fluids from the tank and shall immediately report these test results to the COR who will alert the Pope AFB, Environmental Flight.

5.1.5. Filtering. The contractor shall filter the used oil at each collection point using an in-line filter system. The system shall filter the oil as it is pumped from the containment vessel into the tank truck. The contractor will also filter the used oil again at the delivery point using the facility's existing dual filter system. All wastes from the filtering operation shall be placed in leak proof, contractor furnished, Department of Transportation (DOT) approved containers and turned into the Directorate of Public Works and Environment (DPWE), and Environmental Natural Resources Division (ENRD).

5.1.6. Spill Control and Prevention. The contractor is responsible for the proper use, storage, and disposal of contractor-caused used oil spillage in accordance with Pope AFB Facility Response Plan, reference section 1, page 33, "Person/s discovering the emergency will take all steps possible to immediately alert others in the area, shut down all fuel operations (if appropriate), notify the base Fire Department by dialing 911, and safely initiate steps to control the emergency and reduce the hazard."

5.1.7. Spill Cleanup. Any used oil spillage caused by the contractor while performing services under this contract shall be cleaned up immediately by the contractor according to the State of North Carolina guidance document: *Disposal of Solid Residue from Petroleum Discharge Cleanups*. All contractor vehicles shall have spill control materials such as shovels, absorbents, and plastic bags. If the spill occurs on a concrete or asphalt surface, the contractor shall use an oil absorbent material on the spill and clean up the area until only a stain remains. Disposal of the contaminated material shall be as directed by the DPWE, ENRD. If the spill occurs on natural ground, the contractor shall remove the contaminated soil, replace it with clean soil, and dispose of the contaminate as directed by the ENRD. The area will be returned to its natural state. Used oil spillage shall be contained and stored in contractor-furnished, above ground, approved containers (see Section 4.1.2.1.). The contractor shall provide a written report to the COR of all spills within one working day of the occurrence. The contractor shall take every precaution to prevent oil spillage from entering into the storm drains, sewers, creeks, or other water sources.

5.2. Reprocessing. Fort Bragg is currently accepting unusable petroleum products from Pope AFB under the oil-pumping contract and participating in Defense Supply Center Richmond's (DSCRs) Closed Loop Re-Refined Oil Program. Safety-Kleen Corp provides pickup and re-refining services for the nationwide program. In order to avoid rejection of the unusable petroleum products by Safety-Kleen, JP-8 and MOGAS are not collected for reprocessing. For additional information on DSCRs Closed Loop Re-Refining Program, contact Kim Holland, Product Executive for Re-Refined Motor Oil, at DSN 695-3855.

5.3. Sale/Dispose through DRMO. All DoD components should sell used oil through DRMO to be reprocessed to lubricating oil stock if possible. When used petroleum disposed of through the DRMO, hazardous waste manifesting documents, if required, are to be signed by the Base Hazardous Waste Program Manager or authorized representative in the event of the Base Hazardous Waste Program Manager's absence.

5.4. Unauthorized Disposal Practices.

5.4.1. Unauthorized disposal practices may subject the Air Force to possible legal action and pose a serious ecological and safety hazard, as well as a loss of renewable resource. Such practices may also expose individuals to criminal liability. Unauthorized disposal practices include, but are not limited to: landfilling; use for road-oiling, dust control, or weed abatement; or other similar practices that have the potential to release used oil into the environment.

NOTE: As of March 1, 1990, North Carolina banned the disposal of used oil in landfills.

5.4.2. Unauthorized discharge and/or spill of used petroleum products into the environment must be reported immediately to the Base Fire Department at 394-2117 or 911. The location, type of hazardous materials/waste involved, and the extent of the release shall be given to the Fire Department. Response shall be in accordance with the Release Notification Procedures (Section 18) of the Spill Prevention Control, and Countermeasures Plan.

6. Financial Accountability. Recoverable products represent a significant economic resource. Every effort should be made to collect, segregate, and return on-specification petroleum products to inventory and to reuse or recycle recoverable petroleum products. If on-Base reuse or recycling is not possible, disposal of recyclable or unusable petroleum products through DRMO sale should be pursued. Proceeds from the sale of recyclable products should be properly credited to the RRR program at Pope AFB to offset the collection cost of products sold.

6.1. Accounting for Fuel. Fuel recovered and returned to storage under the control of the Fuels Management Officer (43 SUPS/LGSF) for use as original grade or downgraded to any product, including ground fuel, shall be accounted for according to AFMAN 23-110, USAF Supply Manual (formerly AFM 67-2, Vol 1, Part 3, Chapter 1 and AFM 67-1, Part 2, Chapter 27).

6.1.1. Fuels Returned to Storage as Original Grade. Each time an aircraft or vehicle is defueled and fuel is returned to storage as original grade, the organization responsible for the aircraft or vehicle is credited at standard price for the amount of fuel returned. When multiple agencies contribute to a central collection point, credits for the fuel shall be distributed on a percentage basis to each flying organization. DoD 4140.25-M and MIL-HDBK 200G, *Military Standardization Handbook, Quality Surveillance for Fuels, Lubricants, and Related Products*, and procedures concerning Defense Logistics Agency-owned fuel shall be followed.

6.1.2. Fuels Returned to Storage in a Different Grade. Each time an aircraft or vehicle is defueled and fuel is returned to storage in a grade different from its original grade, the organization responsible for the aircraft or vehicle shall be credited for the amount of fuel at the standard price of the original grade. Other accounting requirements include processing an identity change, a shipment, and requesting Defense Energy Supply Center (DESC) approval through HQ AMC/LGSF, in accordance with DoD 4140.25-M.

6.2. Used Oils and Other Petroleum Products. Proceeds from the sale of used petroleum products, other than aviation and ground fuels, shall be credited for use in base energy conservation and environmental programs. Products recovered, which cannot be returned to the Fuels Management Office, shall be accounted for by local base procedures. The generating activity shall document and maintain information on recovered products including date, who received the product, type of product, estimated volume, and disposition and service orders.

6.3. Surplus Product. Surplus petroleum products, which can be recycled, should be sold through DRMO.

6.4. Reprocessed Products. Recycling through reprocessing may be a viable alternative for off-specification or contaminated fuel that is not suitable for downgrading. For very large quantities of such fuel (usually base fuels bulk storage product contaminated through fire, spill, etc.), the Fuels Management Office, in coordination with the Base Contracting function and HQ AMC, should investigate the potential for recycling the product through reprocessing. This effort includes researching the local commercial refining or reprocessing capability (see Section 5.2.), checking the potential for recycling or reprocessing through the DESC wholesale system, or comparing the costs associated with reprocessing to costs for a new product buy to costs associated with disposal as a waste.

6.5. Unusable Petroleum Products. Petroleum products not returned to base storage or reused on base or at other DoD installations in the vicinity (e.g., Fort Bragg) are considered unusable. These products should be properly identified by the generating activity on appropriate item records and sold

through the DRMO. Requests for recycling DESC- owned fuel should be sent to DESC for consideration with an information copy sent to HQ AMC.

RICHARD J. CASEY, Brigadier General, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 32-7061, *The Environmental Impact Analysis Process*

AFI 23-502, *Recoverable and Unusable Liquid Petroleum Products*

TO42B-1-23, *Management of Recoverable and Waste Liquid Petroleum Products*

TO35-1-3, *Corrosion Prevention, Painting, and Marking for US Air Force Support Equipment*

TO36-1-3, *Painting, Marking, and Lighting Requirements*

TO42B1-1, *Quality Control Of Fuels and Lubricants*

DLAR 4145.41/AFR 71-5, *Performance Oriented Packaging of Hazardous Material*

AFMAN 23-110, *USAF Supply Manual*

DoD 4140.25-M and MIL-HDBK 200G, *Military Standardization Handbook, Quality Surveillance for Fuels, Lubricants, and Related Products*

Abbreviations and Acronyms

AAFES—Army Air Force Exchange Service

AFB—Air Force Base

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFR—Air Force Regulation

AGE—Aerospace Ground Equipment

AMC—Air Mobility Command

APS—Aerial Port Squadron

CAS—Centralized Accumulation Site

CEF—Fire Protection Flight

CEOILF—Liquid Fuels Maintenance

CEOIP—Power Production

CES—Civil Engineering Squadron

CEV—Environmental Flight

CFR—Code of Federal Regulations

COR—Contracting Officer's Representative

DoD—Department of Defense

DOT—Department of Transportation
DESC—Defense Energy Support Center
DPWE—Directorate of Public Works and Environment
DRMO—Defense Reutilization and Marketing Office
DSCR—Defense Supply Center Richmond
DSN—Defense Switched Network
ENRD—Environmental Natural Resources Division
FMO—Fuels Management Office
HAZMART—Hazardous Material Pharmacy
HQ—Headquarters
ID—Identification
JP—Jet Petroleum
KO—Contracting Officer
LGMFS—Structural Maintenance
LGMFW—Wash Rack
LGMP—Propulsion Flight
LGMPB—Propeller Section
LGMT—Maintenance Flight
LGSDH—HAZMART
LGSF—Fuels Management Flight
LGSFO—Fuels Operations Element
LGTM—Vehicle Maintenance
LGTMG—General Purpose Maintenance
LGTMR—Refueling Maintenance
LGTMS—Material Control
MOGAS—Motor Gasoline
MWRSS—Morale, Welfare & Recreation Self Service
MIL-HDBK—Military Handbook
MXS—Maintenance Squadron
NCOIC—Noncommissioned Officer in Charge
OPS—Operations
POL—Petroleum, Oil, and Lubricants

PPM—Parts Per Million

RRR—Resource, Recovery, and Recycling

RR&W—Recyclable Recoverable and Waste

TO—Technical Order

TRDL—Aerial Delivery Flight

TRK—Air Freight Flight

STS—Special Tactics Squadron

SUPS—Supply Squadron

SVS—Services Squadron

TRANS—Transportation Squadron

USEPA—United States Environmental Protection Agency

Terms

Generating Activities—A base agency (host, tenant, contractor) that generates recoverable and unusable petroleum products.

Recoverable Products—Products that still have useful physical or chemical properties:

Off-Specification Product—Product, which has one or more off-specification characteristics (e.g., color, vapor pressure, flash point, etc.) Off-specification products can be blended as regraded products. Off-specification products are not identified as hazardous waste fuel.

On-Specification Product—Product of suitable quality for return to the Base inventory. TO 42B-1-23, table 3-1, Management of Recoverable and Waste Liquid Petroleum Products, sets the criteria for a suitable quality. Do not consider as off-specification if the presence of solids and water can be removed by rotation through on-hand separators.

Unusable Petroleum Product—Product that is no longer suitable for any use on an installation due to excessive contamination or quality degradation.

Hazardous Waste Fuel—A waste petroleum product mixed with a hazardous waste or exhibits a characteristic of hazardous waste as defined by the 40 CFR 261, in which there is intent to discard.